

High Capacity Fiber Optic Solutions

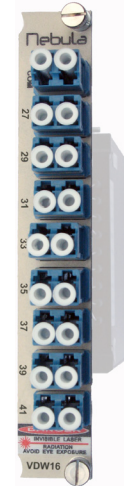
Part Number **V-DWDM16**

Applications

- 16 channel DWDM overlay onto fiber infrastructure
- Single-fiber and dual-fiber DWDM optical multiplexing

Features

- Low loss
- DWDM band fits within the 1551 nm CWDM band
- Cost effective



Optical Specifications

Parameter	Min	Max	Unit	Notes
ITU Grid Wavelength Identifiers	26	41		
Wavelength Nominal Center	1556.55	1544.53	nm	16 channels at 100 GHz spacing
	192.6	194.1	THz	
Pass Bandwidth @0.5 dB	-0.1	+0.1	nm	
Insertion Loss		5.0	dB	
Adjacent Channel Isolation	25		dB	
Non-Adj. Channel Isolation	35		dB	
Uniformity		1.5	dB	
Thermal Drift		1	pm/°C	
Directivity Add/Drop Port	40		dB	
Return Loss all ports	45		dB	
Polarization Dependant Loss		0.1	dB	
Polarization Mode Dispersion		0.1	dB	
Power Handling		300	mW	

Environmental Characteristics

Parameter	Min	Max	Unit	Notes
Storage Temperature Range	-40	+85	°C	
Operating Temperature Range	0	+70	°C	Within spec. Device will not be not damaged unless Storage Temp Range exceeded.

Connectorization

Ports	Connector
Common	LC
DWDM Add/Drop	LC

Application Information

The V-DWDM16 can be used to carry up to 16 wavelengths over a fiber pair. Each wavelength may support 1 Gbps, OC-48 or 10 Gbps via choice of the optical modules used in the attached equipment. The V-DWDM16 has been designed to interoperate with a CWDM multiplexer over the 1551 nm CWDM band.

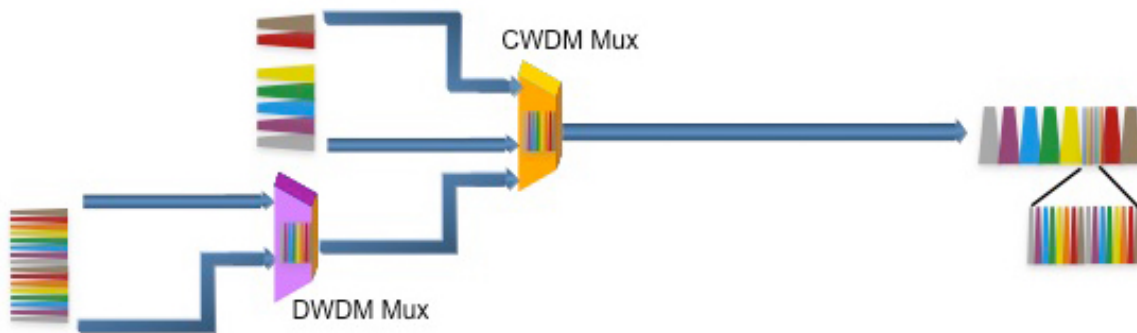


Figure 1 - Upgrade a CWDM System by adding the V-DWDM16

The V-DWDM16 can be used with common Erbium Doped Fiber Amplifiers such as Nebula's AM-ID-01 to enable very long links.

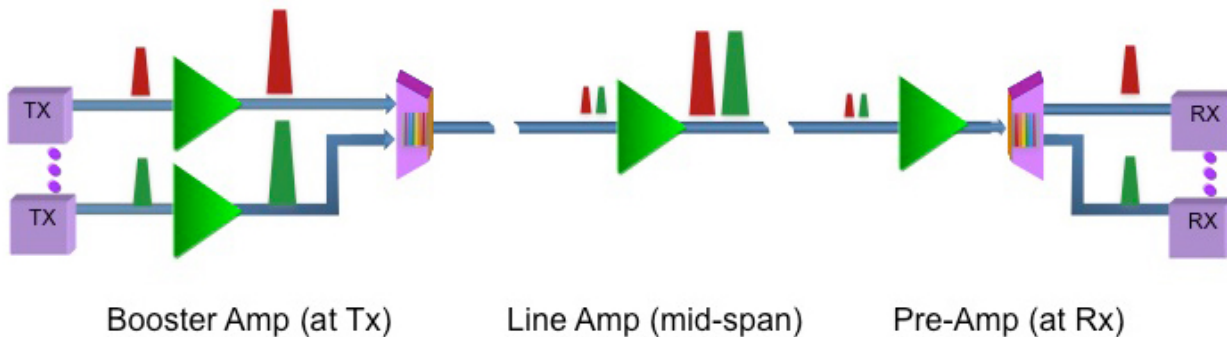


Figure 2 - Add EDFA's to Stretch a DWDM System's Reach

DWDM to CWDM Multiplexer Interoperation

DWDM Multiplexer	CWDM Channel	Compatible Nebula Multiplexers
V-DWDM16	1551 nm	V-CWDM16, V-CWDM8, V-CWDM4, V-CWDM14, V-CWDM17
V-DWDM 8	1531 nm	